REMARKS

Claims 1-5 and 7-30 are pending in this application. By this Amendment, claims 1 and 26 have been amended, and claim 6 has been cancelled. These amendments are being made to facilitate early allowance of the presently claimed subject matter. Applicants reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claim priority to the instant application. Reconsideration in view of the above amendments and following remarks is respectfully requested.

In the Office Action, claims 1-4 and 6-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Daubenspeck et al. (US Patent No. 6,498,385), hereinafter "Daubenspeck"; and claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daubenspeck in view of Huggis (US Patent No. 5,953,577). Applicants respectfully submit that the claimed invention is allowable for the reasons stated below.

With respect to claim 1, Applicants submit that Daubenspeck does not disclose, *inter alia*, "a fuse element that ... is located in a non-last metal layer[.]" Contrary to the Office's assertion, Daubenspeck exemplifies a conventional fuse positioning in a last metal layer. That is, the metal filling 114 is not located in a non-last metal layer, because in Daubenspeck, wire segments 108a and 108b are in a last metal minus one layer (LM-1) and as is well known in the art, any metal layer above a LM-1 would be the last metal layer. The metal filling 114 of Daubenspeck (located above the LM-1 layer) is located in a last metal layer, not a non-last metal layer, so that it can be opened by laser deletion. (Col. 10, line 64). Actually, Daubenspeck discloses "using chemical mechanical polishing (CMP) to damascene a last metal (LM) wiring level and fuses." (Col. 11, lines 28-30).

Moreover, because the fuse line 114c of the Daubenspeck device is in a last metal layer, Duabenspeck does not include "wet etching the fuse element to open the fuse." (Claim 1). Rather, Daubenspeck has to laser blow fuse line 114c (col. 10, line 64; col. 11, line 42), because without an opening to a fuse element in a non-last metal layer, wet etching is impractical as it will proceed at nearly equal rates in all directions (including 114a and 114e). (See col. 10, lines 33-36 of Daubenspeck.) In view of the foregoing, Daubenspeck does not disclose each and every feature of claim 1.

With respect to claims 12 and 19, as explained above, Applicants submit that Daubenspeck does not disclose, *inter alia*, that "the fuse element is located in a non-last metal layer." Specifically, as discussed above, fuse line 114c of Daubenspeck is in the last metal layer, not a non-last metal layer. In view of the foregoing, Daubenspeck does not disclose each and every feature of claims 12 and 19.

With respect to claim 26, Applicants submit that Daubenspeck does not disclose, *inter alia*, that "each terminal is fully-landed on an upper surface of a wire of the fuse element." In Daubenspeck, fuse terminals 114a and 114e are in the same layer as fuse line 114c, and extend, in part, downwardly. Therefore, the terminals are not positioned above fuse line 114c. (See FIG. 1G of Daubenspeck.) In view of the foregoing, in Daubenspeck, terminals 114a and 114e are not fully-loaded on an upper surface of a wire of the fuse line 114c.

With respect to claim 30, Daubenspeck does not disclose that the opened fuse line includes a metal liner. Daubenspeck discloses a liner exists below segment 114c. (Col. 10, lines 64-65). However, Daubenspeck removes the fuse line 114c and "the liner below segment 114c." (Id.) That is, Daubenspeck does not disclose, *inter alia*, an opened fuse area with "the metal

liner being intact immediately adjacent to, and in non-contact, with a plurality of terminals." In view of the foregoing, Daubenspeck does not disclose either "a metal liner of a fuse element" or "the metal liner being intact[.]" (Claim 30).

In view of the foregoing, Daubenspeck does not anticipate the current invention. Accordingly, Applicants respectfully request withdrawal of the rejections.

The dependent claims are believed allowable for the same reasons stated above, as well as for their own additional features.

CONCLUSIONS

Applicants respectfully submit that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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